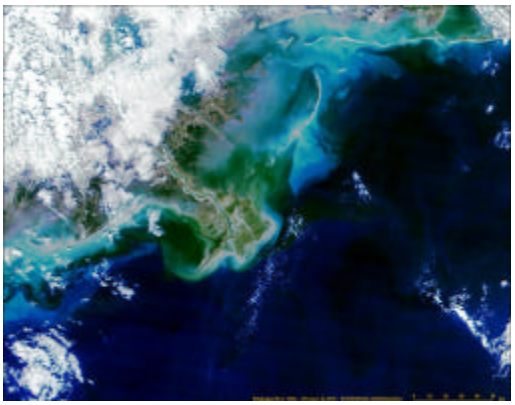
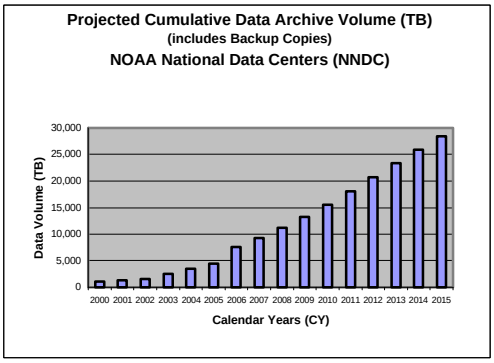
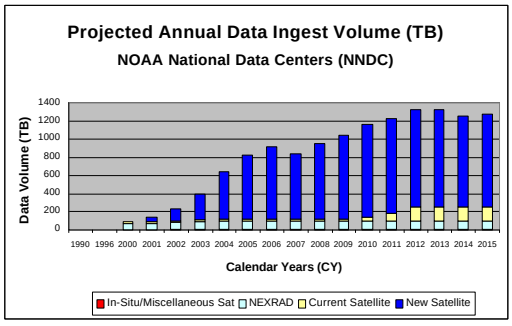
# National Environmental Satellite, Data, and Information Service
# EOS Data Archive & Access System



**MODIS Data from NASA EOS TERRA Satellite – Mississippi Delta**




**The National Requirement:** The Nation requires the ability to exploit the vast amount of new satellite-based environmental data generated by the expected 100-times increase in data volume per satellite that will begin in the near future. The Nation has invested more than a billion dollars in the development and flight of a series of satellites in the NASA Earth Observing System (EOS). The data from these satellites constitute a wealth of information to address science, industry, and social issues over the years to come. These data must be preserved and made accessible to users in a variety of economic, research, government, and public sectors.

**NOAA's Response:** NASA EOS data, when combined with NOAA satellite and *in situ* data, represent most of the environmental observations available to U.S. scientists, industry, and government agencies to examine climate issues, and make progress on weather sensitive industrial issues and important weather and climate applications. NASA EOS will contribute large increases in data rates and volumes over the next several years. Current estimates are that EOS alone will contribute over 4,000 terabytes of information to NOAA data archives, with most of it arriving at NOAA over the next 7 years. These expected large increases in data rates and volumes will far exceed the data archive capacity and capabilities of the NOAA National Data Centers.

The NESDIS EOS Data Archive & Access System will allow NASA data to be archived on a standardized archive management system, integrated with a robust, large-volume, rapid-access storage and retrieval system that is capable of storing the incoming large array environmental data, *in situ* data, and operational products and information.

**Financing:** The FY 2003 budget request includes $3.0 million to procure additional media storage hardware and telecommunications equipment that NOAA requires to store the NASA EOS environmental data. Without this additional capacity, NOAA will be unable to preserve NASA EOS data and critical environmental data will be forever lost.